We claim:

1   1.   A method, comprising:

2   examining an MPEG stream;

3   identifying packets in the MPEG stream that are associated with navigation

4   points in a playback of the MPEG stream; and

5   placing information on the identified packets in a navigation database.

1   2.   The method of claim 1, wherein:

2   examining an MPEG stream includes examining a transport stream.

1   3.   The method of claim 1, wherein:

2   the navigation database is in a separate file from the MPEG stream.

1   4.   The method of claim 1, wherein:

2   the navigation database is not encoded in the MPEG stream.

1   5.   The method of claim 1, wherein:

2   identifying packets includes identifying packets associated with selected

3   presentation times in the playback.

1   6.   The method of claim 1, wherein:

2   identifying packets includes identifying a packet containing a video I-frame

3   with a presentation time near one of the selected presentation times.

1   7.   A method, comprising:

2   retrieving information on specified packets in an MPEG stream from a

3   navigation file that is separate from the MPEG stream; and

4   using the retrieved information to navigate the MPEG stream.

1   8.   The method of claim 7, wherein using the retrieved information to navigate

2   includes:

3   identifying a point in the MPEG stream identified by the retrieved information;

4   processing the MPEG stream starting at the point; and

5   presenting at least a portion of the processed MPEG stream.

1   9.   The method of claim 8, wherein:

2   presenting includes presenting video data.

1   10.   The method of claim 8, wherein:

2   presenting includes presenting audio data.

1   11.   The method of claim 8, wherein:

2   identifying a point includes identifying a video I-frame.

1   12.   A machine-readable medium having stored thereon instructions, which when

2   executed by at least one processor cause said at least one processor to perform

3   operations comprising:

4   examining an MPEG stream;

5   identifying packets in the MPEG stream that are associated with navigation

6   points in a playback of the MPEG stream; and

7   placing information on the identified packets in a navigation database.

1   13.   The medium of claim 12, wherein:

2   examining an MPEG stream includes parsing packets in the MPEG stream.

1   14.   The medium of claim 12, wherein:

2   the navigation database is in a separate file from the MPEG stream.

1   15.   The medium of claim 12, wherein:

2   the navigation database is not encoded in the MPEG stream.

1   16.   The medium of claim 12, wherein:

2   identifying packets includes identifying packets associated with selected

3   presentation times in the playback.

1   17.   The medium of claim 12, wherein:

2   identifying packets includes identifying a video I-frame with a presentation time

3   near one of the selected presentation times.

1   18.   An apparatus, comprising:

2   a medium to provide an MPEG stream; and

3   an authoring tool coupled to the medium to examine the MPEG stream and to

4   produce navigation information for a navigation file separate from the

5   MPEG stream.

1   19.   The apparatus of claim 18, further comprising:

2   a storage device to store the navigation file.

1   20.   The apparatus of claim 18, further comprising:

2   a transmission interface to transmit the navigation file.

1   21.   The apparatus of claim 18, wherein:

2   the authoring tool includes a processor and a computer program.

1   22.   The apparatus of claim 18, wherein:

2   the navigation file includes data identifying specific points in the MPEG stream.

1   23.   The apparatus of claim 18, further comprising:

2   a playback component to navigate the MPEG stream based on contents of the

3   navigation file.

1   24.   A system, comprising:

2   an encoder to encode digitized video and audio data into packets in an MPEG

3   stream;

4   a navigation generator coupled to the encoder to:

5   examine the MPEG stream;

6   generate navigation information on packets associated with specific

7   presentation points in the MPEG stream; and

8   store the navigation information in a navigation file separate from a file

9   to store the MPEG stream; and

10   a decoder to read and decode portions of the MPEG stream identified by the

11   navigation information.

1   25.   The system of claim 24, further comprising:

2   a player to present the decoded portions of the MPEG stream.

1   26.   The system of claim 24, wherein:

2   the MPEG stream includes timing information for synchronized presentation of

3   the video and audio data.